Carpenteria

CNPS SEQUOIA CHAPTER



March 2021 www.cnps-sequoia.org

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FIELD REPORT

Scout Island

--Jane Pritchard

Janet and I met in 2015 during the first iNaturalist class put on by Sierra Foothill Conservancy. Most of the class was made up of my hiking friends. Sonya was a friend from classes taken at Fresno City College 15 years previously. She taught canoeing and riparian natural history at Scout Island and arranged for me



Photos from Scout Island | Facebook

and Janet to volunteer at the nursery there.

Scout Island is the beautiful Outdoor Education Center for Fresno County Schools, composed of 85 acres on the San Joaquin River in Fresno. Busloads of kids of all ages get a hands-on exposure to the local environment, including the San Joaquin River watershed, geology, flora, fauna, and cultural history. Of the ones who help in the nursery, a few become very interested. They treat Janet and me like great grand-mothers and are always courteous and helpful.

The nursery has a large potting structure, two screened misting areas, a small greenhouse, and an area to hold plants after they are established. Mainly native plants are grown there and made available for free to nonprofit organizations; we grow what is requested from cuttings, from seed we collect, or from seed provided by the agency that wants plants. People from the



agencies sometimes do their own planting there.

The areas containing plants are gated to keep out deer. Squirrels raid pots, even covered ones, for the acorns. We now put them in the greenhouse until the oaks are 2 to 3 inches tall. Beavers take out all the trees planted unless they are protected with cages. They even felled a huge eucalyptus tree last week.

There are fun things like a zipline that used to produce shrieks and laughter heard at the nursery. Now things are quiet, except for the mower and leaf blower. When COVID is over, all the classes and our helpers will return.



CHINA CREEK REPORT

February Work Party

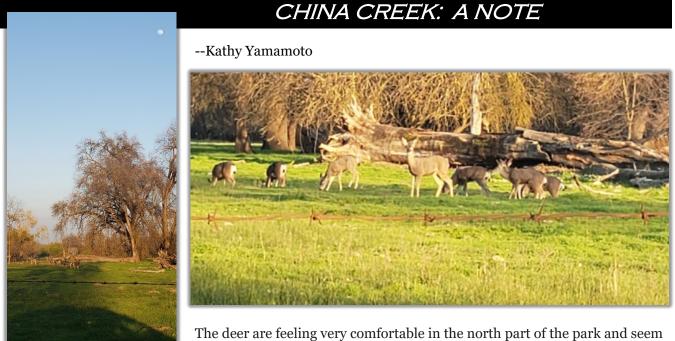
--Warren Shaw

It was a classic central California clear, cool, and breezy early spring day. We had a great turnout, so we started the day with a big crew taking shovels and hoes to thistle rosettes. After a coffee and muffin break, during which Reagen and the other botanists did a plant identification talk, we mostly turned to other chores. One group potted acorns (to be planted later) as we intend to "rewild" the northwest corner of the Park that has been grazed for many years. Another sturdy crew moved our stock of tree cages and t-posts to a clearing behind our equipment container, thus rescuing them from the cattle that have been scratching themselves on them, flattening several. Others, while checking the trail, found all the signs in good condition, and the trail itself not yet in need of mowing. However, they did experience one failure when trying to remove some brightly painted graffiti from the bark of several oaks by wire brushing. Plan B for that process? It was suggested by the Chapter's Education Chair that lightly shaving the bark with a drawknife might work. Volunteer figs, which are among our most troublesome invasives, were both marked and mapped. Some of these will be used by CalFire for chainsaw training; others will be girdled in hopes that killing them and leaving them standing will allow them to continue to provide habitat, without reproducing.

It was, all in all, a great day in the Park, with a lot accomplished and a chance to appreciate the beauty of spring in our natural world.

Our first March work party will be Saturday, March 6, from 8am to 12pm. We'll get back to weeding, of course, begin removing the fencing in the northwest corner, do some planting around the container, and whatever else needs doing. Our botanists promise more plant identification information at break time. It should be another gorgeous spring morning to spend in the Park. We sure hope you can join us then.

Our second March work party will be Saturday, March 20, same time. We double up in March and April (April 10th and 24th), both because spring is prime time for dealing with our weeds and because the weather is nicer for working in the Park. We'll then take July and August off entirely.



The deer are feeling very comfortable in the north part of the park and seen to be enjoying the beautiful evenings at China Creek Park!

Photos by K. Yamamoto

TREASURE HUNT ANNOUNCEMENT

Creek Fire CNPS Rare Plant Treasure Hunt in Jose Basin

--Chris Winchell

May 8-9, 2021

The Sequoia Chapter, in coordination with the Sierra National Forest, is hosting a Rare Plant Treasure Hunt (RPTH) in Jose Basin within the 380,000-acre Creek Fire burn area. This will be a unique opportunity for people of all botanical skill levels to get to know and document first-hand nearly a dozen CNPS California Rare Plant Rank (CRPR) species, while also providing valuable data to Forest Service land managers and CNPS's rare plant program.



The RPTH program has been a great way for volunteers to gather vastly more information than public lands botanists can obtain on their own. More information on the RPTH program can be found online at:

https://www.cnps.org/wp-content/uploads/2018/03/cnps_rpth_manual-2012.pdf

-Rare plant habitat in Jose Basin-



Photos by Chris Winchell

Situated along the San Joaquin River upslope of Redinger Lake and located between Shaver Lake and Auberry, Jose Basin has long been known as a botanical hotspot. Drained by Jose Creek and its tributaries, the basin's steep forested slopes, gently sloping grasslands, woodlands, large granitic outcrops, chaparral, meadows, creeks, and seeps provide a wide array of suitable habitats for rare plant species. While Jose Basin is known to be home to at least 12 rare plant species and has been the focus of many botanical surveys over the past 40 years, this year is the perfect time for renewed botanical exploration. Areas of rare plant habitat that were, until the Creek Fire, blocked by dense, impenetrable, shrubby vegetation will be much more accessible in 2021.

-slender-stalked monkeyflower-



While devastating to parts of the Forest and to the people who lost homes and businesses, the vegetation types burned by the Creek Fire in the Jose Basin area evolved with regular fire. Most of the fire had low to moderate soil burn severity (SBS – will be explained at the RPTH). The fire had a diverse and patchy effect on the landscape, which will result in a wide variety of plant life. In addition to rare plants, a suite of fire-adapted herbs and shrubs emerge the first-year post-fire, especially in the foothill chaparral at the lower elevations of Jose Basin. These fascinating plants are cued to germinate by smoke, leachate

(rainwater that travels down burned shrub and tree stems), and extreme heat. This RPTH will also be a treasure hunt for these "fire-followers" such as whispering bells (*Emmenanthe penduliflora*) and golden eardrops (*Ehrendorfia chrysantha*). Photos will be provided to volunteers to help key in on these species.

Since fire can provide an opportunity for invasive non-native plants to spread and establish rapidly, volunteers will receive information and ID hints for the invasive weeds, so that sightings can be reported to the Forest Service. -3-orange lupine-



This two-day event is open to all skill-levels. Attendance on both days is not necessary to participate. Expect some strenuous hiking on steep slopes. Sierra National Forest Botanist Joanna Clines and I, Chapter Rare Plant Coordinator Chris Winchell, will be on hand to assist with plant identification and documentation on this treasure hunt. Due to the ongoing pandemic, COVID safety guidelines will be implemented, and group size will be limited. Safety practices for working in a burned area will be outlined at the start of each day, and strictly adhered to. The Forest Service will provide hard hats (mandatory) and other equipment as needed.

For this treasure hunt, we will focus on these rare species:

Common Name	Scientific Name	Listing	California Rare Plant Rank
Abram's onion	Allium abramsii	none	1B.2
Mariposa pussypaws	Calyptridium pulchellum	FT	1B.1
Orange lupine	Lupinus citrinus var. citrinus	FSS	1B.2
Slender-stalked monkey flower	Erythranthe gracilipes	FSS	1B.2
Tree anemone	Carpenteria californica	FSS, ST	1B.2

FT=Federally Threatened; ST=State Threatened; FSS=U.S. Forest Service Sensitive; 1B.1 Seriously threatened in CA and rare, threatened, or endangered elsewhere; 1B.2 Moderately threatened in CA and rare, threatened, or endangered elsewhere

To register for this event or if you have any questions, contact Chris Winchell at cjwinchell@gmail.com or Joanna Clines at joanna.clines@usda.gov or 559-760-3618. Further details will be provided (directions to meeting place, photo guides, etc.) as the date nears.

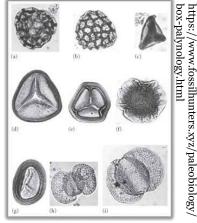
THE SCIENCE OF PLANTS

Palynology

--Jane Pritchard

The word palynology is derived from the Greek word palunein, meaning to sprinkle or scatter, and from the Latin word pollen, meaning flour or dust. The term is inter-changeable with paleobotany, where pollen and spores are gathered from archeological sites, soils, and lake bottoms to study past climate changes from season to season, or between millennia. The first spores found were in sedimentary rock dated to mid-Ordovician (460-470 million years ago); pollen is dated from the Carboniferous period (320-300 million years ago).

Pollen, smaller than 10 microns to larger than 200 microns, is produced by seed plants. Seedless plants (mosses, clubmosses, ferns) produce spores 5 to 150 microns. They can be identified to family, genus, maybe to species, sometimes even to variety based on the varied size and shape. They have a thin,



-Figure by Ken Higgs-

glassy, plastic cover highly resistant to decay. Sediment sequences from lakes, estuaries, peat bogs are more continuous than from land because pollen and spores are trapped in thin, stratified layers, mostly undisturbed by plant and animal life.

The pollen in each layer of a sediment core is washed from the soil and identified at 400-1000x magnification. The percentage of each type of pollen is charted vs. time. The result after all layers are -4-

studied (laborious and time consuming) is a local record of vegetation back into the last glacial period. The record can be crosschecked with geological data and archeological excavations. Information in archeological excavations is taken from inside pots, stone tool edges, storage pits, and living floors and reflects what was grown and eaten, how homes were built, what was fed to animals, and changes in the local climate.

English plantain (*Plantago lanceolata*), a non-native here, is widespread in Europe and America in disturbed areas and demonstrates its long relationship with humans. English plantain pollen does not appear in Danish peat until the first agriculture in early Neolithic times (12000-6500 years ago). Then, forest was cleared by fire leaving a narrow band of charcoal in the peat. Just above the charcoal, woodland plant pollen disappears for a time while pollen of plantain increases progressively layer by layer as it increased in the fields. Oak pollen decreased while pollen of cereals and birch increased. Then farmers moved on and left the same type of sediment core elsewhere.

CHAPTER REPORTS

Rekindled Relationship

--Reagen O'Leary

We are looking forward to collaborating and hosting joint events with Sierra Foothill Conservancy (SFC). It has been years since we have worked together, and the Sequoia Chapter members have been asking for this collaboration for quite a while. There are many things we can offer each other; they can provide us access to their preserves for hikes, events, and docent tours; we can offer

their members horticultural guidance on planting natives, plant identification, and expertise with a passion for native plants. Working with all local conservancies and an array of local groups is going to be the bedrock of our success in public outreach and education for our newly energized chapter. I am particularly looking forward to collaborating with SFC, as they manage and own lands within foothill habitats that otherwise are not accessible to the public.

<u>UZE</u>

Here's to a Superbloom

--Leslie Lipton

The magic happens when diverse groups share a zone of common passion. On Monday night, February 22, 2021, a broad mix of curious plant people joined to share information about distinguishing between native wildflowers and introduced weeds, and removing them mindfully. Age range was roughly 19-82, education range high

school to grad school, and political leanings far right to far left. Our common goal will help save biodiversity.

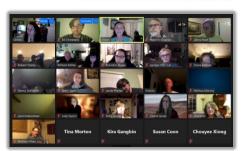
While the majority of Monday's attendees were members of Native Plants Live Here (NPLH), there were also several CNPS-only members, a number of NPLH-CNPS folks, and four college students, three in a Fresno City College class on Field Biology taught by a CNPS member. If this gathering is a budding microcosm of what can bloom in our reach, then our Sequoia Chapter may have plentiful wildflowers in its future.

It takes time to form a community. As Horticulture Chair, I intend to attract a broad base of humans to the joy and importance of planting California plants in private and in public — in service of native biodiversity. My local Coarsegold group, the Sequoia Chapter, young people looking to become college grads, and interests yet to be identified, will never form a perfect union. We can, though, form a more perfect one, meeting by meeting.

Find a recording of the meeting at www.nativeplantslivehere.com/.

-Martin Preserve with McKenzie in the background-

-Photo by Allyson Brooks, SFC Community Engagement Manager-



UPCOMING WEBINAR COURSES

•Beautiful Basics for Your Garden: Useful Foundational Native Plants the Deer Don't Like, Monday, March 29, 7:00 – 8:30pm

Useful foundational native plants



 To receive Zoom meeting information or to join the *Native Plants Live Here* group and receive all their emails, including Zoom invitations go to http://www.nativeplantslivehere.com

BOTANICAL PHOTOS

•Help find populations of Layia glandulosa!

- As part of the California Conservation Genomics Project, Bruce Baldwin and Isacc Marck would be grateful for any of your observations of flowering white layia (*Layia glandulosa*) to help them direct their fieldwork.
- Please contact them with a date, location, and, preferably, a photo of observed *Layia qlandulosa* in support of this project.

For details on the plant characteristics and where to send your sighting information go to:

https://mailchi.mp/berkeley/help-find-populationsof-layia-glandulosa?e=733affbbe2

•Photos of plants for Bloom! California campaign.

• CNPS Headquarters is seeking photos of the following native plants:

mints (monardella species), clarkia, phacelia, manzanita, toyon, iris, oaks, currants, yarrow, ornamental grasses, and salvias. If you have photos of these plants that you are willing to share, please send them with the scientific name of the plant and the photographer name (if you want photo credit) to: cnpssequoiachapter@gmail.com

•Applications Sought for 2021 Special Project Grants

- The American Penstemon Society is pleased to offer small grants to persons or organizations whose activities promote knowledge and appreciation of Penstemons, particularly those that foster conservation of the species in the wild or further their appreciation in the wild and in domestic landscapes.
- Maximum grant amount is \$1000.
- Please submit your proposals or questions to Dorothy Tuthill via email at dtuthill@uwyo.edu.

For detailed requirements go to:

http://www.penstemons.org/index.php/society/gran ts

EVENTS

•Spring Into Your Garden Water-wise Plant Sale Friday-Saturday, March 19-20



- 10% discount to CGB members. Bring your member card.
- $_{\odot}$ $\,$ Masks and physical distancing will be required.
- Hand sanitizer will be made available throughout the garden.

Membership

If you require corrections or additions to your membership information contact Cherith Drescher at echerith@gmail.com.

The Sequoia Chapter serves Fresno, Madera, and Kings Counties.

Thanks to new and renewing members.

The IRS considers dues in excess of \$12 per year and all gifts to CNPS as tax deductible. Renew your CNPS membership online using a credit card. As an option, renew automatically year after year. It is quick, easy, and convenient, and reduces renewalmailing costs. Visit www.cnps.org and click on the "Join us" or "BE A MEMBER" button. You'll be allowed to choose the Sequoia Chapter during the process.

Next Newsletter: April 2021

Send newsletter suggestions to Laura Castro at lacastror@outlook.com.

The deadline for submissions to the next newsletter is Saturday, March 27, 2021.



Role	Name and Email			
President and Programs	Reagen O'Leary reagenoleary@gmail.com			
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Hospitality Co-chair	Kathy Yamamoto kty52@yahoo.com			

Wondy Murillo

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			Co-chair	mmwendy88@gm	
M.F.	Join 🍵 the California Native F	PLA.	ΝΤ SOCIETY	Renew	
6	Membership includes the quarterly CNPS journal, <i>Fremonti</i> news and announcements of Society activities and conservation				
10	I wish to affiliate with the Sequoia Chapter.		Student, Fixed Income	 \$25	
			Individual	\$50	
	Name:		Plant Lover	\$120	
			Supporter	\$500	
	Address:		Patron	\$1,000	
	City:		Benefactor	\$2,500	
	State: Zip:		Steward	\$5,000	
			Guardian	\$10,000	
	Make your check payable to "CNPS" and mail with this form to:				
			California Native Plant Society		
	New Member Renewing Member		2707 K Street, 5		
		Sacramento, CA 95816-5113			
	The California Native Plant Society is a statewide nonprofit organization o California's native plants. The mission of the Society is to increase understa:				

preserve them in their natural habitat through scientific activities, education, science, and conservation.

SEQUOIA CHAPTER CONTACTS

CARPENTERIA March 2021

CALIFORNIA NATIVE PLANT SOCIETY SEQUOIA CHAPTER

c/o Laura Castro + P.O. Box 414 + Fresno, CA 93708

INTRODUCTION



Meet the President, Reagen O'Leary

I am a born and raised Central California local. I can thank my mother for introducing me to the central Sierra Nevada mountains and foothills as a child. While she would visit with her many friends who lived in the "hills", I would go off on exploring excursions with the local children, where most of the time I was the only girl in the group. We captured reptiles and amphibians and discovered wild treasures like streams, ponds, and old "cowboy trash" as we called it. But most memorable were my first sightings of unique flowers. I have a



distinct memory of finding a purple fairy-lantern (Calochortus amoenus) (of course I did not know what it was then), and I longed to know what it was called someday. That wish was granted when in college I took a Plant Taxonomy course at Fresno State University. That class not only solved so many long-standing mysteries for me, but also ignited my passion for using native plants in my own gardens.

In high school and in college I wore so much floral-patterned clothing that I became known as "the flower child." I have a particular memory of a beloved pair of daisy stretchy pants that I wore proudly in high school. I wish I still had those pants, and I wish I had a picture of me in them to share with you, but I have neither. Imagine large daisies on a black background, an oversized yellow shirt, and socks to match. The only thing that would have been better, in my opinion, is to have had sunflowers in the print instead of daisies. Ah, annual sunflowers (Helianthus annus)! They have always been my favorite, particularly the wild ones in the summer on the edges of the California highways. In my education, I was thrilled to learn that annual sunflower was a native Californian. I was also thrilled to learn that those odd year-round blooming sunflowers along State Route 180 are actually a different species (Helianthus winterii) from the annual sunflowers, as described in 2013 by John Stebbins, Chris Winchell, and John Constable.

Since January of this year, we have had an organic synthesis of new involvement in our chapter's board. I am looking forward to coordinating future Sequoia Chapter events and meeting all of you (the members). Honestly, I'm considering my role as president as the glue that will keep our ideas and opportunities moving forward for the benefit of native plants and our planet. In the spirit of gratitude, compassion, and collaboration, I thank you for allowing me to serve in this role. -8-